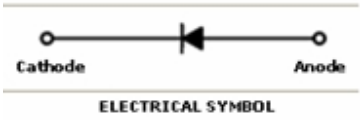
MM8Z2V0C to MM8Z75VC

SOD-882 Surface Mount
Zener Voltage Regulators

Green Product

SOD882 Package



Absolute Maximum Ratings T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation	200	mW
T_{STG}	Storage Temperature Range	-55 to +150	°C
T_J	Operating Junction Temperature	+150	°C

These ratings are limiting values above which the serviceability of the diode may be impaired.

Specification Features:

- § High Speed Switching
- § Small Surface Mounting Type (DFN1006)
- § RoHS Compliant
- § Green EMC
- § Matte Tin(Sn) Lead Finish
- § Band Indicates Cathode
- § Weight: approx. 0.001g

Electrical Characteristics T_A = 25°C unless otherwise noted

Device Type	Device Marking	V_Z @ I_{ZT} (Volts)			I_{ZT} (mA)	Z_{ZT} @ I_{ZT} (Ω) Max	I_{ZK} (mA)	Z_{ZK} @ I_{ZK} (Ω) Max	I_R @ V_R (μA) Max	V_R (Volts)
		Min	Nom	Max						
MM8Z2V0C	8±	1.90	2.0	2.10	5	100	1	564	120	0.5
MM8Z2V2C	8⊥	2.09	2.2	2.31	5	100	1	564	120	0.7
MM8Z2V4C	80	2.2	2.4	2.6	5	100	1	1000	50	1
MM8Z2V7C	81	2.5	2.7	2.9	5	100	1	1000	20	1
MM8Z3V0C	82	2.8	3.0	3.2	5	100	1	1000	10	1
MM8Z3V3C	83	3.1	3.3	3.5	5	95	1	1000	5	1
MM8Z3V6C	84	3.4	3.6	3.8	5	90	1	1000	5	1
MM8Z3V9C	85	3.7	3.9	4.1	5	90	1	1000	3	1
MM8Z4V3C	86	4.0	4.3	4.6	5	90	1	1000	3	1
MM8Z4V7C	87	4.4	4.7	5.0	5	80	1	800	3	2
MM8Z5V1C	88	4.8	5.1	5.4	5	60	1	500	2	2
MM8Z5V6C	89	5.2	5.6	6.0	5	40	1	200	1	2
MM8Z6V2C	8A	5.8	6.2	6.6	5	10	1	100	3	4
MM8Z6V8C	8B	6.4	6.8	7.2	5	15	1	160	2	4
MM8Z7V5C	8C	7.0	7.5	7.9	5	15	1	160	1	5
MM8Z8V2C	8D	7.7	8.2	8.7	5	15	1	160	0.7	5
MM8Z9V1C	8E	8.5	9.1	9.6	5	15	1	160	0.2	7
MM8Z10VC	8F	9.4	10	10.6	5	20	1	160	0.1	8
MM8Z11VC	8G	10.4	11	11.6	5	20	1	160	0.1	8
MM8Z12VC	8H	11.4	12	12.7	5	25	1	80	0.1	8
MM8Z13VC	8J	12.4	13	14.1	5	30	1	80	0.1	8

Electrical Characteristics

T_A = 25°C unless otherwise noted

Device Type	Device Marking	V_Z @ I_{ZT} (Volts)			I_{ZT} (mA)	Z_{ZT} @ I_{ZT} (Ω) Max	I_{ZK} (mA)	Z_{ZK} @ I_{ZK} (Ω) Max	I_R @ V_R (μA) Max	V_R (Volts)
		Min	Nom	Max						
MM8Z15VC	8K	14.3	15	15.8	5	30	1	80	0.05	10.5
MM8Z16VC	8L	15.3	16	17.1	5	40	1	80	0.05	11.2
MM8Z18VC	8M	16.8	18	19.1	5	45	1	80	0.05	12.6
MM8Z20VC	8N	18.8	20	21.2	5	55	1	100	0.05	14
MM8Z22VC	8P	20.8	22	23.3	5	55	1	100	0.05	15.4
MM8Z24VC	8R	22.8	24	25.6	5	70	1	120	0.05	16.8
MM8Z27VC	8S	25.1	27	28.9	2	80	0.5	300	0.05	18.9
MM8Z30VC	8T	28	30	32	2	80	0.5	300	0.05	21
MM8Z33VC	8U	31	33	35	2	80	0.5	300	0.05	23.2
MM8Z36VC	8V	34	36	38	2	90	0.5	500	0.05	25.2
MM8Z39VC	8X	37	39	41	2	130	0.5	500	0.05	27.3
MM8Z43VC	8Y	40	43	46	2	150	0.5	500	0.05	30.1
MM8Z47VC	8Z	44	47	50	2	170	0.5	500	0.05	32.9
MM8Z51VC	8−	48	51	54	2	180	0.5	500	0.05	35.7
MM8Z56VC	8=	52	56	60	2	200	0.5	500	0.05	39.2
MM8Z62VC	8≡	58	62	66	2	215	0.5	500	0.05	43.4
MM8Z68VC	8>	64	68	72	2	240	0.5	500	0.05	47.6
MM8Z75VC	8<	70	75	79	2	255	0.5	500	0.05	52.5

V_F Forward Voltage = 1 V Maximum @ I_F = 10 mA for all types

Notes:

1. The Zener Voltage (V_Z) is tested under pulse condition of 10mS.
2. For detailed information on price, availability and delivery of nominal zener voltages between the voltages shown and tighter voltage tolerances, contact your nearest Tak Cheong Electronics representative.
3. The zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current (I_{ZT} or I_{ZK}) is superimposed to I_{ZT} or I_{ZK}.

RATING AND CHARACTERISTIC CURVES

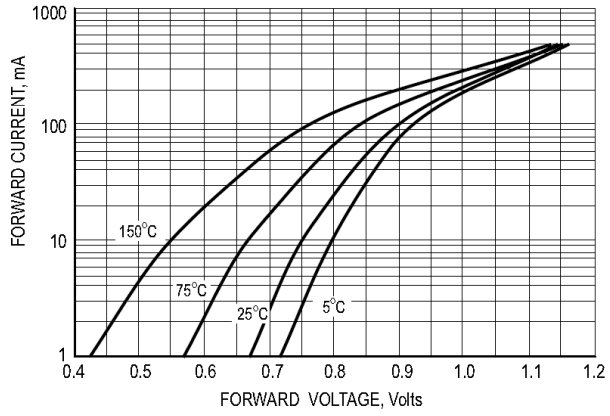


Fig.1 TYPICAL FORWARD VOLTAGE

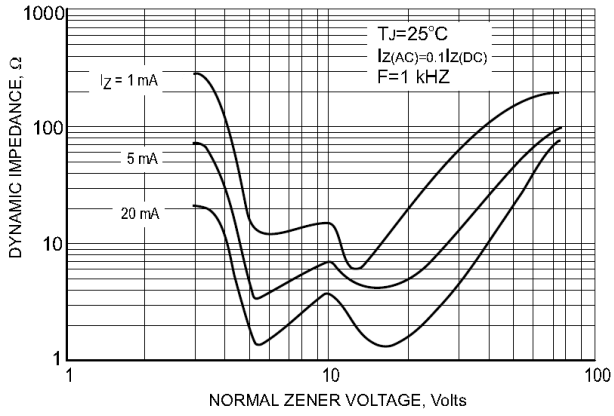


Fig.2 EFFECT OF ZENER VOLTAGE ON ZENER IMPEDANCE

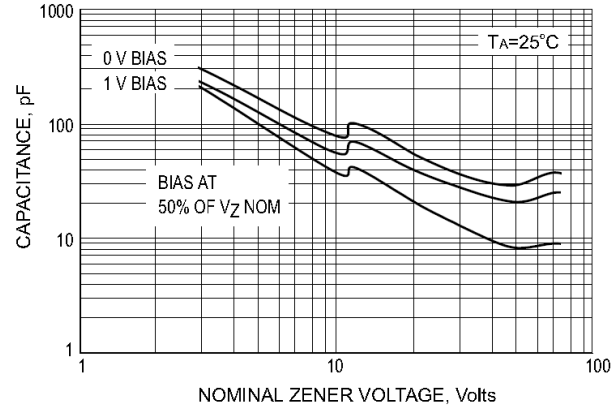


Fig.4 TYPICAL CAPACITANCE

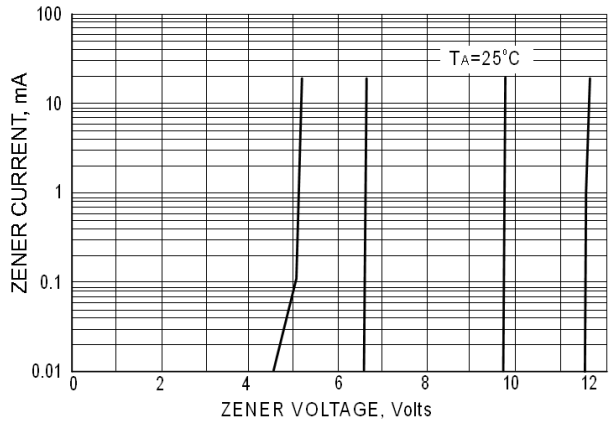


Fig.5 ZENER BREAKDOWN CHARACTERISTICS

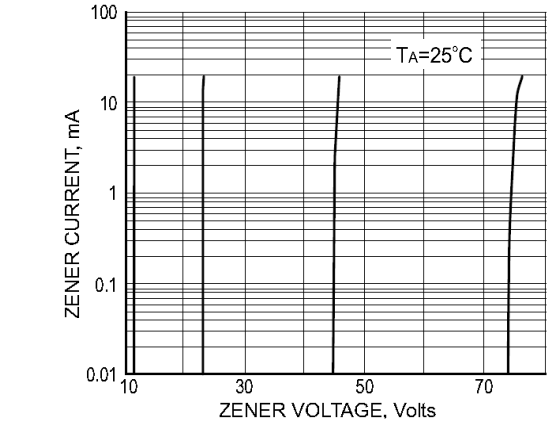


Fig.6 ZENER BREAKDOWN CHARACTERISTICS

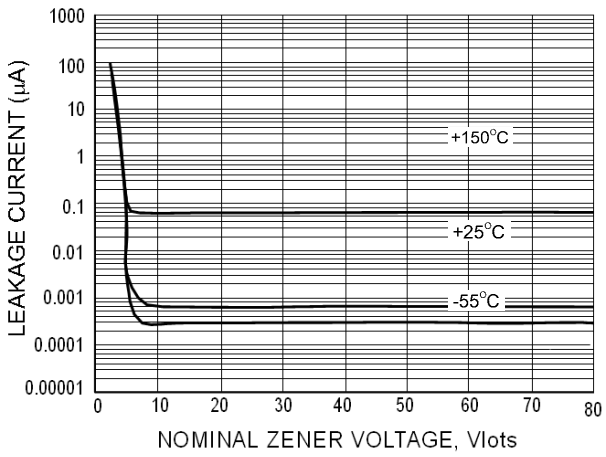
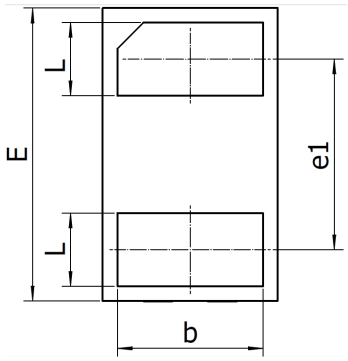
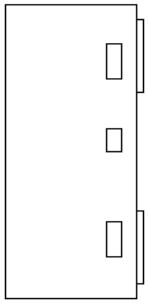
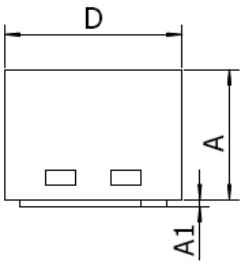


Fig.7 TYPICAL LEAKGE CURRENT

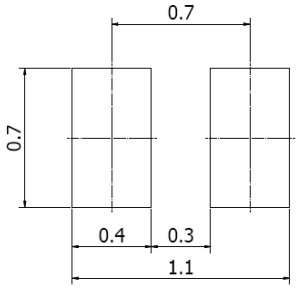
SOD882 Package Outline







Typical Soldering Pattern(mm):



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.46	0.50	0.018	0.020
A1	---	0.03	---	0.001
b	0.45	0.55	0.018	0.022
D	0.55	0.65	0.022	0.026
E	0.95	1.05	0.037	0.041
e1	Typ. 0.65		Typ. 0.026	
L	0.20	0.30	0.008	0.012

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